

Amendment
Serial No. 10/695,642
Attorney Docket No. 032061

REMARKS

Claims 1-21 are pending in the above-identified application. Claims 12-14 and 16-21 have been withdrawn from consideration. Claim 6 is cancelled. Claims 1 and 5 are amended. No new subject matter is added. It is respectfully submitted that this Amendment is fully responsive to the Office Action dated July 11, 2005.

Claim 6 was rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Applicants cancel claim 6, without prejudice. Accordingly, this objection is now moot.

Claim 5 is amended to recite that *a surface of the insulating film is dehydrated by coating alcohol thereon after the plasma is irradiated onto the insulating film and before the self-orientation layer is formed*. Support for this amendment is found, for example, in FIG. 5 and the relevant description.

Claims 1-2 and 7-11 were rejected under 35 U.S.C. §102(b) as being anticipated by *Sekiguchi* [US 2002/0024142]. To expedite prosecution, Applicants amend claim 1 to clarify that the plasma is irradiated *onto the insulating film to form nitrogen-hydrogen (N-H) bonds on a surface thereof*. [Claim 1]. Support for this amendment is found, for example, in FIG. 13 and the relevant description. In view of this amendment and the following remarks, Applicants respectfully request that the rejection of claims 1-2 and 7-11 be withdrawn.

A claim is only anticipated if each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. Here, for example, *Sekiguchi*, fails to disclose the step of *exciting a plasma of a gas having a molecular structure in*

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which hydrogen and nitrogen are bonded and irradiating the plasma onto the insulating film to form nitrogen-hydrogen (N-H) bonds on a surface thereof. [Claim 1]. Instead, *Sekiguchi's* teachings are directed to plasma processing intended to "nitride".

In particular, *Sekiguchi* lacks necessity and motivation to employ a gas having a molecular structure in which hydrogen and nitrogen are bonded. As shown in FIG. 13 of the above-identified application, a plasma processing using only nitrogen (N_2) gas does not cause satisfactory orientation on the insulating film. Thus, to promote the self-orientation of a film formed on an insulating film, it is important that nitrogen-hydrogen (N-H) bonds are formed on the surface of the insulating film, as recited in the amended claim 1. Accordingly, Applicants respectfully request that the Examiner withdraw the rejection of these claims.

Claims 3-4 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Sekiguchi* in view of *Abe* [U.S. 2002/0013057]. Applicants respectfully disagree with the Examiner's position, because the claimed invention, which is not disclosed or suggested in *Sekiguchi* or *Abe*, is not obvious from the teachings of these references. Also, claims 3-4 depend from independent claim 1, and should likewise be allowable by nature of dependency.

Applicants appreciate the Examiner's acknowledgement that claim 15 is allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims. However, claim 15 depends from claim 1 and should be allowable in view of the above remarks and amendment.

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For at least the foregoing reasons, the claimed invention distinguishes over the cited art and defines patentable subject matter. Favorable reconsideration is earnestly solicited.

Should the Examiner deem that any further action by applicants would be desirable to place the application in condition for allowance, the Examiner is encouraged to telephone applicants' undersigned attorney.

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,
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